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[Continued on next page]

(54) Title: POLYNUCLEOTIDES ENCODING AMINOLEVULINIC ACID BIOSYNTHETIC ENZYMES

SEO ID NO:04	MATTISATTAAAAAATTAKPROSSSALCORVAGGERRRSGVVRCDAAG
SEQ 10 80:12	MANATEPECARTERILLECERSSSPPPSRSSFTTPPGOMRRTLIGRGVIRCDAQP
SEQ 10 #0:29	MAVSTSPPGARLEALLLECGSSMAATATATTTTRLSCFC-ETRETLVQSQRQPIRCEASS
	1 60
SEO ID NO:04	u-eacagavarrasvarlegfrisa-grymkerstiaviglsvetapværeklavatel
SEO ID #0:12	-SDASSVAPHHATALSALEGLETSAADRYTTEESSIIAIGLEVHTAPVEHREKLAIPEAE
SED ID MO:29	ASDVVADATRIAASVSALEQLETSAADRYTKERSSVHVIGLSVHSTPVERREELAIPEAE
	61 120
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SEQ ID NO:04	WPRAICELYSLAHIEERAVLSTCHRMETYVVALSHERGIREVVINNSKESCIPASELATE
5EQ 10 MO:12	wydatakicsi nei zeaavlstchere i yvlalsohrovkevnenosktssvyvselsom
SEQ ID WO:29	WPHATAELCSLINETEEAAVLSTCHROETYVVALSKREGVKEVTEWNSKTSGTPVADLCQH
	121 180
480 TD 80-04	LPILESSDATERLEEVSAGLOSLVLOSSGILAGVKQVVESGONSGGLGKNIDENFKDAIT
SEQ ID RO:04 SEQ ID RO:12	RPILTHWINSTOHLPEVSAGLDSLVLGEGOILSQVGQVVKVGQGVMGYGRKISGLFKKAIT
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	181 240
	AGKRYRSETUI SEGAVEVSSAAVELÄLNUL PESPALSÄRNIL LERGRINGSLVIRHLVARG
SEQ ID 100:04	ACKRARIETHI SSCAVO VSBAAVELATROC PEASEDRARMI VIGACROREZ VIRLIVARG
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SEQ ID 180:12	Chrywyrisyervaa ireerkote tytrpleintoaaaradyytt stasetslitarek Chrywyriservaa ireelkote tytrleinltoagradlyttstreinplylkery
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SEQ ID MO:12 SEQ ID MO:04 SEQ ID MO:04 SEQ ID MO:12 SEQ ID MO:29	CHYWYWILYENYN AIREDWOITIYYN LETHOLARACAWYT STALSTIL FACHA CHRWYWILSEAWAA FREICHDU I I THPLESTU TCORGAWYT STALSTIL FACHA 360 361 ELIPPASTWOGWELFU I SYWRWACAWST WAARWYN WOLLETWAARKTELLEARA ELIPPASTWOGWELFU I SYWRWACAWST WAARWYN WOLLETWAARKTELLEARA ELIPPASTWOGWELFU I SYWRWACAWST WAARWYN WOLLETWAARKTELLEARA ELIPPASTWOGWELFU I SYWRWACAWST WAARWYN WOLLETWAARKTELLEARAG 351
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(57) Abstract: This invention relates to an isolated nucleic acid fragment encoding an aminolevulinic acid biosynthetic enzyme. The invention also relates to the construction of a chimeric gene encoding all or a portion of the aminolevulinic acid biosynthetic enzyme, in sense or antisense orientation, wherein expression of the chimeric gene results in production of altered levels of the aminolevulinic acid biosynthetic enzyme in a transformed host cell.

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